

Mobile Data Project Team

IPMobileNet Follow-Up Answers

In the February 20, 2004 meeting of the UWIN Technology Steering Committee, Mobile Data Project Team, IPMobileNet was asked to get back with the team on certain questions. The questions, along with their answers from the vendor are supplied below:

1. What receiver sensitivity changes should be made to model 700 Mhz 32 Kbps coverage?
The change from 19.2 Kbps to 32 Kbps results in a 3dB reduction in performance. The 700 MHz mobile output power is 30 Watts.
2. What vehicle changes are required?
Mounting – The 700 MHz radio is approximately 30% larger. New mounting holes will be required.
Antennas – Antennas tuned to the proper frequency will be required.
Antenna placement – The current antenna placement will be acceptable provided the antennas are not spaced on an integer multiple of 7.7 inches.
Power connector – A superior power connector is being used on the new radio. An adapter will be provided if desired.
Filtering – Power filtering should not be required, depending on vehicle electrical system. RF filtering may be required depending on other radio equipment in the vehicle.
3. What changes are required for site equipment?
The power supply, cables and backhaul communications equipment will not change. All other site equipment including antennas, duplexers, isolators, filters, etc. will have to be changed for the frequency.
4. Will the IPNC be able to support both UHF 19.2K and 700 32 K bases simultaneously?
The current IPNC software and hardware will support both type of base stations simultaneously.
5. How much isolation is required between the xmit and receive base station antennas?
85 dB